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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/942,833	08/29/2001	Mike Courtney	CNTW-008/00US	9218

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EXAMINER

PHAN, THAI Q

ART UNIT	PAPER NUMBER
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2128

DATE MAILED: 03/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/942,833

Applicant(s)

COURTNEY, MIKE

Examiner

Thai Q. Phan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4/17/02, 7/16/03 and 3/5/04.</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office Action is in response to patent application S/N: 09/942,833. Claims 1-36 are pending in the action.

The information disclosure statements (IDSs) were considered by the examiner.

Drawings

The drawings filed on 08/29/2001 are acceptable for examination.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1, 24 and 29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As cited feature of "generated according to at least a portion of the retrieved at least the representation of the configuration schema" in claims 1 and 29 are unclear for what it refer to.

Claim 24, recited "generated according to at least a portion of the retrieved at least a representation of the configuration schema" is unclear: what "a portion" in the claim imply for, and it's unclear for what "at least a portion of the retrieved at least a representation" in the claim refer to.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 1-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shafer, Philip, US patent application no. US 2002/0191619 A1.

As per claim 1, Shafer discloses a method and system for modeling a network router interface and configuring the device interface with feature limitations very similar to the claimed invention. According to Shafer, the network device modeling and interface method includes means and steps:

Determining characteristics of the network device for interfacing (such as power, voltage, current, ports, i/o bandwidth, etc),

Retrieving network configuration schema corresponding to the determined characteristic of the network device ([0037], [0042], [0044]) for network routing function, for example,

Retrieving a first of the plurality of configuration commands from the network device configuration corresponding to the network device, and

Generating XML file or object corresponding to the retrieved configuration command, wherein the XML object is generated according to the retrieved configuration schema ([0033], [0035], [0037], [0042]-[0059]). Shafer does not expressly disclose a portion of the retrieved configuration as claimed.

Practitioner in the art at the time of the invention was made would have found Shafer disclosure in the present US patent application with feature limitations of network router interface, command line formats translation, router configuration changes, etc. would require the claimed limitation of a portion of the configuration being used for a specific application such as a specific command line for router configuration change, command line for network device elements change, device configuration modules change, format translation or converting for device compatible, etc.

As per claim 2, Shafer discloses a plurality of network device modes, configuration files for each device module, network configuration schema, control operating systems, etc. as claimed.

As per claim 3, Shafer discloses the configuration schema for network configuration. Such schema would include a hash key for a network configuration schema and for schema portions for command interface.

As per claim 4, Shafer disclosure would include a hash table for network configuration schema, and for network routing and interface.

As per claim 5, Shafer implies a look up table for routing data in the network routers, for the retrieved configuration command, for example.

As per claim 6, Shafer discloses a configuration schema for a network connection and device operations. Such configuration schema would include tags or look-up table for mapping or hash function for network interface and for command line translation, for example.

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As per claims 7-9, Shafer discloses a step of converting the XML object to an XML document and verifying with schema of validation ([0042]-[0046]).

As per claim 10, Shafer discloses a system and method for modeling a network router interface and for configuring the device interface for the network with feature limitations very similar to the claimed invention. According to Shafer, the network device modeling and interface system includes means and steps:

Determining characteristics of the network device or an intermediate schema representation of the network device in the network for interfacing (such as power, voltage, current, ports, i/o bandwidth, etc),

Retrieving network configuration schema corresponding to the determined characteristic of the network device ([0037], [0042], [0044]) for network routing function, for example,

Retrieving a first of the plurality of configuration commands from the network device configuration corresponding to the network device, and

Generating XML file or object corresponding to the retrieved configuration command, wherein the XML object is generated according to the retrieved configuration schema ([0033], [0035], [0037], [0042]-[0059]). Shafer does not expressly disclose a converter for converting XML as claimed.

Practitioner in the art at the time of the invention was made would have found Shafer disclosure in the present US patent application with feature limitations of network router interface, command formats translation, router configuration changes, etc. would

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require the claimed limitation of the XML converter for converting or translating CLI into XML format as claimed.

As per claims 11-12, Shafer discloses the claimed network router and network storage element in a network management system.

As per claims 13-15, Shafer discloses means for storing DOM and means for temporarily storing DOM ([0046]-[0049], [0057], [0060]).

As per claims 16-18, Shafer discloses means for translating or converting XML, CLI and interface means as claimed ([0057]-[0060]).

As per claims 19-23, Shafer discloses a network router interface for modeling and configuring device interface with feature limitations very similar to the claimed invention. According to Shafer, the network device modeling and interface system includes means and steps:

Determining characteristics of the network device or an intermediate schema representation of the network device in the network for interfacing (such as power, voltage, current, ports, i/o bandwidth, etc),

Retrieving network configuration schema corresponding to the determined characteristic of the network device ([0037], [0042], [0044]) for network routing function, for example,

Retrieving a first of the plurality of configuration commands from the network device configuration corresponding to the network device, and

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Generating XML file or object corresponding to the retrieved configuration command, wherein the XML object is generated according to the retrieved configuration schema ([0033], [0035], [0037], [0042]-[0059]),

Means for storing DOM and means for temporarily storing DOM ([0046]-[0049], [0057], [0060]),

Means for translating XML, CLI and graphical user interface means as claimed ([0057]-[0060]). Shafer does not expressly disclose a converter for converting XML as claimed.

Practitioner in the art at the time of the invention was made would have found Shafer disclosure in the present US patent application with feature limitations of network router interface, command line formats translation, router configuration changes, etc. would require the claimed limitation of the XML converter for converting or translating CLI into XML format as claimed.

As per claim 24, Shafer discloses a network router interface for modeling and configuring device interface with feature limitations very similar to the claimed invention. According to Shafer, the network device modeling and interface method includes means and steps:

Determining characteristics of the network device for interfacing (such as power, voltage, current, ports, i/o bandwidth, etc),

Retrieving network configuration schema corresponding to the determined characteristic of the network device ([0037], [0042], [0044]) for network routing function, for example,

Retrieving a first of the plurality of configuration commands from the network device configuration corresponding to the network device, and

Generating XML object file or a claimed standard format protocol (XML is also a standard format) corresponding to the retrieved configuration command, wherein the XML object is generated according to the retrieved configuration schema ([0033], [0035], [0037], [0042]-[0059]). Shafer does not expressly disclose a portion of the retrieved configuration as claimed.

Practitioner in the art at the time of the invention was made would have found Shafer disclosure in the present US patent application with feature limitations of network router interface, command formats translation, router configuration changes, etc. would require the claimed limitation of a portion of the configuration being used for a specific application such as for a specific command for router configuration change, command for a new network device element, device configuration format, format translation or converting for device compatible, etc.

As per claim 25, Shafer discloses a plurality of network device models, configuration files for each device module, network configuration schema, control operating systems, etc. Such network device models and configuration schema for the network operation would include an intermediate configuration scheme for data transportation, for retrieving and transmitting data over the network. Shafer also discloses the configuration schema for network configuration. Such schema would include a network routing function or a hash key for a network configuration schema or for a portion of the schema.

As per claim 26, Shafer disclosure would include a look-up table or a hash function for the retrieved configuration command translation.

As per claim 27, Shafer discloses look-up keys or tables in the intermediate representation for network routers, configuration schema, and routing interface in a translated format such as the standard XML.

As per claim 28, Shafer discloses a configuration schema for a network connection and device operations. Such configuration schema would include tags or look-up table for mapping or hash function for network interface.

As per claim 29, Shafer discloses a method and system for modeling a network router interface and configuring the device interface with feature limitations very similar to the claimed invention. According to Shafer, the network device modeling and interface method includes means:

A network processor for routing data (Figs. 1-2),

A storage device connected to the processor for data and routing information storage,

A plurality of program instruction stored in the storage device, the instructions executed by the processor for

Determining characteristics of the network device for interfacing (such as power, voltage, current, ports, i/o bandwidth, etc),

Retrieving network configuration schema corresponding to the determined characteristic of the network device ([0037], [0042], [0044]) for network routing function, for example,

Retrieving a first of the plurality of configuration commands from the network device configuration corresponding to the network device, and

Generating XML file or object format (standard for industry operation) corresponding to the retrieved configuration command, wherein the XML object is generated according to the retrieved configuration schema ([0033], [0035], [0037], [0042]-[0059]). Shafer does not expressly disclose a portion of the retrieved configuration as claimed.

Practitioner in the art at the time of the invention was made would have found Shafer disclosure in the present US patent application with feature limitations of network router interface, command formats translation, router configuration changes, etc. would require the claimed limitation of a portion of the retrieved configuration for format representation because each network device requires a specific format for interface and its own configuration file for command line thus it only requires a portion of the retrieved configuration schema for command line interface translation or for format representation.

As per claim 30, Shafer discloses a plurality of network device modes, configuration files for each device module, network configuration schema, control operating systems, look-up tables or hash key, etc. as claimed.

As per claim 31, Shafer discloses the configuration schema for network configuration. Such schema would include a look-up key (hashing) for a network configuration schema or for schema portions.

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As per claim 32, Shafer discloses a look up table for routing data in network routers, for the retrieved configuration command, command line interface translation, for example.

As per claims 33-36, Shafer discloses a step of converting the XML object to an XML document and verifying with schema of validation ([0042]-[0046]).

Conclusion

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1. US patent no. 6,725,233 B2, issued to Froyd et al, on Apr. 2004

2. US patent application publication no. US 2002/0032769 A1, issued to Barkai et al, on Mar. 2002

3. US patent application publication no. US 2002/0038320 A1, to Brook, on Mar. 2002

4. US patent application publication no. US 2002/0174091 A1, to Froyd et al, on Nov. 2002

5. US patent application publication no. US 2002/0198974 A1, to Shafer, on Dec. 2002

6. US patent application publication no. US 2003/0033589 A1, to Reyna, on Feb. 2003

7. US patent application publication no. US 2003/0048287 A1, to Little et al, on Mar. 2003

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2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Thai Phan whose telephone number is 571-272-3783. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jean Homere can be reached on 571-272-3780. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

3. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ma. 02, 2005



Thai Phan
Patent Examiner
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